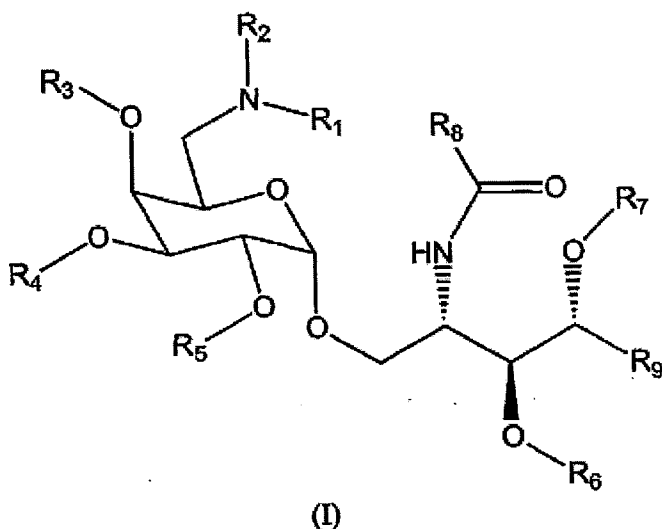


CLAIMS

The following set of claims replaces all the previous set of claims.

1. (Original) A compound of Formula (I):



wherein,

R_1 is:

- (i) hydrogen; or
- (ii) $-\text{SO}_2\text{R}_{10}$,
- (iii) wherein R_{10} is:

halo; hydroxy; OR_{11} ; OR_{12} ; amino; NHR_{11} ; $\text{N}(\text{R}_{11})_2$; NHR_{12} ; $\text{N}(\text{R}_{12})_2$;

aralkylamino; or

$\text{C}_1\text{-C}_{12}$ alkyl optionally substituted with halo, hydroxy, oxo, nitro, OR_{11} , OR_{12} , acyloxy, amino, NHR_{11} ; $\text{N}(\text{R}_{11})_2$; NHR_{12} ; $\text{N}(\text{R}_{12})_2$, aralkylamino, mercapto, thioalkoxy, $\text{S}(\text{O})\text{R}_{11}$, $\text{S}(\text{O})\text{R}_{12}$, SO_2R_{11} , SO_2R_{12} , $\text{NHSO}_2\text{R}_{11}$, $\text{NHSO}_2\text{R}_{12}$, sulfate, phosphate, cyano, carboxyl, $\text{C}(\text{O})\text{R}_{11}$, $\text{C}(\text{O})\text{R}_{12}$, $\text{C}(\text{O})\text{OR}_{11}$, $\text{C}(\text{O})\text{NH}_2$, $\text{C}(\text{O})\text{NHR}_{11}$, $\text{C}(\text{O})\text{N}(\text{R}_{11})_2$, $\text{C}_3\text{-C}_{10}$ cycloalkyl containing 0-3 R_{13} , $\text{C}_3\text{-C}_{10}$ heterocyclyl containing 0-3 R_{13} , $\text{C}_2\text{-C}_6$ alkenyl, $\text{C}_2\text{-C}_6$ alkynyl, $\text{C}_5\text{-C}_{10}$ cycloalkenyl, $\text{C}_5\text{-C}_{10}$ heterocycloalkenyl, $\text{C}_6\text{-C}_{20}$ aryl containing 0-3 R_{14} , or heteroaryl containing 0-3 R_{14} ; or

C₃-C₁₀ cycloalkyl, C₃-C₁₀ heterocyclyl, C₅-C₁₀ cycloalkenyl, or C₅-C₁₀ heterocycloalkenyl optionally substituted with one or more halo, hydroxy, oxo, OR₁₁, OR₁₂, acyloxy, nitro, amino, NHR₁₁, N(R₁₁)₂, NHR₁₂, N(R₁₂)₂, aralkylamino, mercapto, thioalkoxy, S(O)R₁₁, S(O)R₁₂, SO₂R₁₁, SO₂R₁₂, NHSO₂R₁₁, NHSO₂R₁₂, sulfate, phosphate, cyano, carboxyl, C(O)R₁₁, C(O)R₁₂, C(O)OR₁₁, C(O)NH₂, C(O)NHR₁₁, C(O)N(R₁₁)₂, alkyl, haloalkyl, C₃-C₁₀ cycloalkyl containing 0-3 R₁₃, C₃-C₁₀ heterocyclyl containing 0-3 R₁₃, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₅-C₁₀ cycloalkenyl, C₅-C₁₀ heterocycloalkenyl, C₆-C₂₀ aryl heteroaryl containing 0-3 R₁₄, or C₆-C₂₀ heteroaryl containing 0-3 R₁₄; or

C₂-C₆ alkenyl, C₂-C₆ alkynyl, aryl, or heteroaryl optionally substituted with one or more halo, hydroxy, OR₁₁, OR₁₂, acyloxy, nitro, amino, NHR₁₁, N(R₁₁)₂, NHR₁₂, N(R₁₂)₂, aralkylamino, mercapto, thioalkoxy, S(O)R₁₁, S(O)R₁₂, SO₂R₁₁, SO₂R₁₂, NHSO₂R₁₁, NHSO₂R₁₂, sulfate, phosphate, cyano, carboxyl, C(O)R₁₁, C(O)R₁₂, C(O)OR₁₁, C(O)NH₂, C(O)NHR₁₁, C(O)N(R₁₁)₂, alkyl, haloalkyl, C₃-C₁₀ cycloalkyl containing 0-3 R₁₃, C₃-C₁₀ heterocyclyl containing 0-3 R₁₃, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₅-C₁₀ cycloalkenyl, C₅-C₁₀ heterocycloalkenyl, C₆-C₂₀ aryl containing 0-3 R₁₄, or C₆-C₂₀ heteroaryl containing 0-3 R₁₄; or

(iii) -C(O)R₁₀, wherein R₁₀ is defined as above; or

(iv) -C(R₁₀)₂(R₁₅), wherein R₁₀ is defined as above; R₁₅ is hydrogen, R₁₀, or R₁₅ and R₂ taken together forms a double bond between the carbon and nitrogen atoms to which they are attached; or

(v) R₁ and R₂ taken together forms a heterocyclyl of 3-10 ring atoms optionally substituted with R₁₀;

R₂ is hydrogen, or R₂ and R₁₅ taken together forms a double bond between the carbon and nitrogen atoms to which they are attached, or R₂ and R₁ taken together forms a heterocyclyl of 3-10 ring atoms optionally substituted with R₁₀;

R₃, R₄, R₅, R₆ and R₇ are each independently hydrogen, C₁-C₆ alkyl, C₆-C₁₂ aralkyl, or C₁-C₆ acyl;

R₈ is -(CH₂)_xCH₃;

R₉ is a linear or branched C₃-C₁₀₀ alkyl;

R₁₁ is C₁-C₂₀ alkyl optionally substituted with halo, hydroxy, alkoxy, amino, alkylamino, dialkylamino, sulfate, or phosphate;

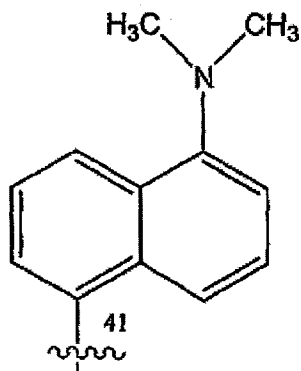
R₁₂ is aryl optionally substituted with halo, haloalkyl, hydroxy, alkoxy, nitro, amino, alkylamino, dialkylamino, sulfate, or phosphate;

Each R₁₃ is independently halo, halo alkyl, hydroxy, alkoxy, oxo, amino, alkylamino, dialkylamino, sulfate, or phosphate;

Each R₁₄ is independently halo, halo alkyl, hydroxy, alkoxy, nitro, amino, alkyl amino, dialkylamino, sulfate, or phosphate; and

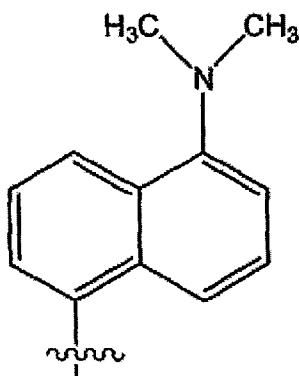
x is 1-100.

2. (Original) The compound of claim 1 wherein x is 24 and R₉ is *n*-tetradecyl.
3. (Original) The compound of claim 2 wherein R₁ is SO₂R₁₀.
4. (Original) The compound of claim 3 wherein R₁₀ is aryl substituted with N(R₁₁)₂;
5. (Original) The compound of claim 4 wherein R₁₀ is:

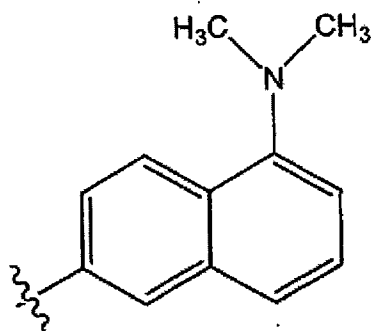


6. (Original) The compound of claim 2 wherein R₁ is C(O)R₁₀.

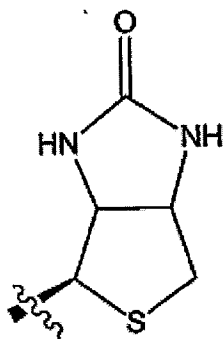
7. (Original) The compound of claim 6 wherein R_{10} is C_1 - C_6 alkyl substituted with halo, hydroxy, oxo, nitro, OR_{11} , OR_{12} , acyloxy, amino, NHR_{11} , $N(R_{11})_2$, NHR_{12} , $N(R_{12})_2$, aralkylamino, mercapto, thioalkoxy, $S(O)R_{11}$, $S(O)R_{12}$, SO_2R_{11} , SO_2R_{12} , $NHSO_2R_{11}$, $NHSO_2R_{12}$, sulfate, phosphate, cyano, carboxyl, $C(O)R_{11}$, $C(O)R_{12}$, $C(O)OR_{11}$, $C(O)NH_2$, $C(O)NHR_{11}$, $C(O)N(R_{11})_2$, C_3 - C_{10} cycloalkyl containing 0-3 R_{13} , C_3 - C_{10} heterocyclcyl containing 0-3 R_{13} , C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_5 - C_{10} cycloalkenyl, C_5 - C_{10} heterocycloalkenyl, C_6 - C_{20} aryl containing 0-3 R_{14} , or C_6 - C_{20} heteroaryl containing 0-3 R_{14} ;
8. (Original) The compound of claim 7 wherein R_{10} is C_1 - C_6 alkyl substituted with $NHSO_2R_{12}$.
9. (Original) The compound of claim 8 wherein R_{12} is:



10. (Original) The compound of claim 7, wherein R_{10} is alkyl substituted with $C(O)R_{12}$.
11. (Original) The compound of claim 10 wherein R_{12} is:

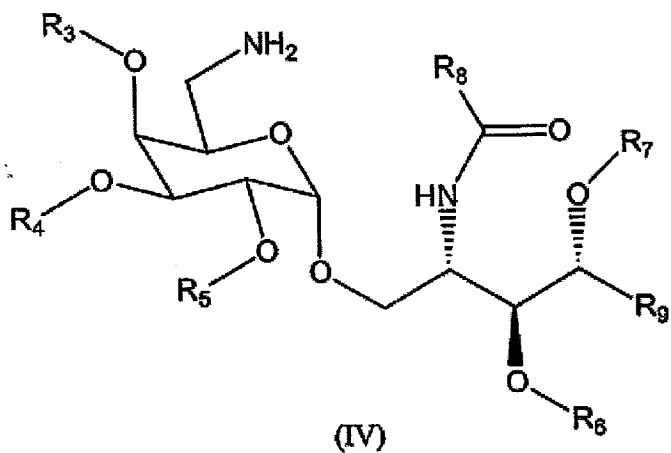
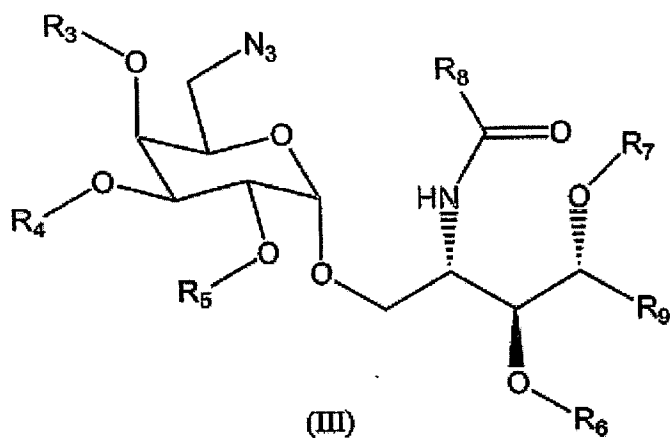


12. (Original) The compound of claim 7 wherein R_{10} is alkyl is substituted with C_5-C_{10} heterocyclyl containing 0-3 R_{13} .
13. (Original) The compound of claim 12 wherein the heterocyclyl is:



14. (Cancelled).
15. (Cancelled).
16. (Cancelled).
17. (Cancelled).
18. (Original) A method of stimulating NKT cells comprising contacting an NKT cell with a compound of Formula (I) and a CD1 protein.
19. (Original) The method of claim 18 wherein the protein is CD1d.
20. (Cancelled).

21. (Cancelled).
22. (Cancelled).
23. (Cancelled).
24. (Original) A method of making a compound of Formula (I) comprising: (i) converting a compound of Formula (III) to a compound of Formula (IV):



and (ii) contacting a compound of Formula (IV) with R_1 -LG to afford a compound of Formula (I), wherein:

R_1 is:

- (i) $-SO_2R_{10}$,

wherein R₁₀ is:

halo; hydroxy; OR₁₁; OR₁₂; amino; NHR₁₁; N(R₁₁)₂; NHR₁₂; N(R₁₂)₂;
aralkylamino; or

C₁-C₁₂ alkyl optionally substituted with halo, hydroxy, oxo, nitro, OR₁₁,
OR₁₂, acyloxy, amino, NHR₁₁, N(R₁₁)₂, NHR₁₂, N(R₁₂)₂, aralkylamino, mercapto,
thioalkoxy, S(O)R₁₁, S(O)R₁₂, SO₂R₁₁, SO₂R₁₂, NHSO₂R₁₁, NHSO₂R₁₂, sulfate,
phosphate, cyano, carboxyl, C(O)R₁₁, C(O)R₁₂, C(O)OR₁₁, C(O)NH₂,
C(O)NHR₁₁, C(O)N(R₁₁)₂, C₃-C₁₀ cycloalkyl containing 0-3 R₁₃, C₃-C₁₀
heterocyclyl containing 0-3 R₁₃, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₅-C₁₀
cycloalkenyl, C₅-C₁₀ heterocycloalkenyl, C₆-C₂₀ aryl containing 0-3 R₁₄, or C₆-
C₂₀ heteroaryl containing 0-3 R₁₄; or

C₃-C₁₀ cycloalkyl, C₃-C₁₀ heterocyclyl, C₅-C₁₀ cycloalkenyl, or C₅-C₁₀
heterocycloalkenyl optionally substituted with one or more halo, hydroxy, oxo,
OR₁₁, OR₁₂, acyloxy, nitro, amino, NHR₁₁, N(R₁₁)₂, NHR₁₂, N(R₁₂)₂,
aralkylamino, mercapto, thioalkoxy, S(O)R₁₁, S(O)R₁₂, SO₂R₁₁, SO₂R₁₂, NHSO₂
R₁₁, NHSO₂R₁₂, sulfate, phosphate, cyano, carboxyl, C(O)R₁₁, C(O)R₁₂,
C(O)OR₁₁, C(O)NH₂, C(O)NHR₁₁, C(O)N(R₁₁)₂, alkyl, halo alkyl, C₃-C₁₀
cycloalkyl containing 0-3 R₁₃, C₃-C₁₀ heterocyclyl containing 0-3 R₁₃, C₂-C₆
alkenyl, C₂-C₆ alkynyl, C₅-C₁₀ cycloalkenyl, C₅-C₁₀ heterocycloalkenyl, C₆-C₂₀
aryl containing 0-3 R₁₄, or C₆-C₂₀ heteroaryl containing 0-3 R₁₄; or

C₂-C₆ alkenyl, C₂-C₆ alkynyl, aryl, or heteroaryl optionally substituted
with one or more halo, hydroxy, OR₁₁, OR₁₂, acyloxy, nitro, amino, NHR₁₁,
N(R₁₁)₂, NHR₁₂, N(R₁₂)₂, aralkylamino, mercapto, thioalkoxy, S(O)R₁₁, S(O)R₁₂,
SO₂R₁₁, SO₂R₁₂, NHSOR₁₁, NHSO₂R₁₂, sulfate, phosphate, cyano, carboxyl,
C(O)R₁₁, C(O)R₁₂, C(O)OR₁₁, C(O)NH₂, C(O)NHR₁₁, C(O)N(R₁₁)₂, alkyl,
halo alkyl, C₃-C₁₀ cycloalkyl containing 0-3 R₁₃, C₃-C₁₀ heterocyclyl containing
0-3 R₁₃, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₅-C₁₀ cycloalkenyl, C₅-C₁₀
heterocycloalkenyl, C₆-C₂₀ aryl containing 0-3 R₁₄, or C₆-C₂₀ heteroaryl
containing 0-3 R₁₄; or

(ii) -C(O)R₁₀, wherein R₁₀ is defined as above; or

(iii) $-C(R_{10})_2(R_{15})$, wherein R_{10} is defined as above; R_{15} is hydrogen, R_{10} , or R_{15} and R_2 taken together forms a double bond between the carbon and nitrogen atoms to which they are attached; or

R_3, R_4, R_5, R_6 , and R_7 are each independently hydrogen, C_1 - C_6 alkyl, C_6 - C_{12} aralkyl, or C_1 - C_6 acyl;

R_8 is $-(CH_2)_xCH_3$;

R_9 is a linear or branched C_3 - C_{100} alkyl;

R_{11} is C_1 - C_{20} alkyl optionally substituted with halo, hydroxy, alkoxy, amino, alkylamino, dialkylamino, sulfate, or phosphate;

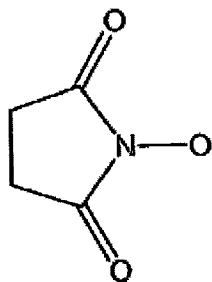
R_{12} is aryl optionally substituted with halo, halo alkyl, hydroxy, alkoxy, nitro, amino, alkylamino, dialkylamino, sulfate, or phosphate;

Each R_{13} is independently halo, halo alkyl, hydroxy, alkoxy, oxo, amino, alkylamino, dialkylamino, sulfate, or phosphate;

Each R_{14} is independently halo, halo alkyl, hydroxy, alkoxy, nitro, amino, alkylamino, dialkylamino, sulfate, or phosphate;

x is 1-100;

LG is halo, $-OSO_2R_{16}$, $B(OH)_2$, or



R_{16} is alkyl, halo alkyl or aryl optionally substituted with alkyl, halo or nitro.

25. (Original) A pharmaceutical composition comprising a compound of Formula (I) and a pharmaceutically acceptable carrier.